



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/538,261

12/09/2005

Bernd Ullmann

1604BPE-6

3296

22442

7590

12/22/2010

SHERIDAN ROSS PC  
1560 BROADWAY  
SUITE 1200  
DENVER, CO 80202

EXAMINER

YAGER, JAMES C

ART UNIT

PAPER NUMBER

1782

MAIL DATE

DELIVERY MODE

12/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,261	<b>Applicant(s)</b> ULLMANN, BERND	
	<b>Examiner</b> JAMES YAGER	<b>Art Unit</b> 1782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7-17 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 7-17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 August 2010 has been entered.

### ***Response to Amendment***

2. The amendment filed 30 August 2010 has been entered. Claims 1, 2, 5, 7-17 and 19-25 are currently pending in the application. The rejections of record from the office action dated 02 March 2010 not repeated herein have been withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1782

4. Claims 1, 2, 5, 7-17 and 19-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "cavity" in line 5. There is insufficient antecedent basis for this limitation in the claim. Should this be "first cavity"?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 5, 12-14, 16 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nash et al. (US 5,714,186).

Regarding claims 1, 2, 5, 12-14, 16 and 19-21, Nash discloses a head generating device comprising a capsule with two compartments that may be cylindrical in shape (i.e. insert for being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace) (Fig. 1, 14 and 16, abstract), wherein the first compartment (Fig. 1, 14) will pressurize (i.e. a body that is activated by pressure having at least one first cavity) (C5/L59-67) and beer will enter the second compartment (i.e. a positioning device interconnected to said body having at least one second cavity) (C6/L1-6; Fig. 1, 16), wherein the first compartment has a small opening which is above

Art Unit: 1782

the level of the liquid (i.e. said body having an opening that allows said at least one cavity to communicate with said headspace) (Fig. 2, top of tube 20), wherein the second compartment has a small opening (i.e. an opening arranged in a lower surface of said positioning device, which is in communication with said at least one second cavity, said opening being submerged in the gas-pressurized liquid when said insert is floating on the gas-pressurized liquid) (Fig 1 and 2, 28) and an additional opening (i.e. ventilation opening arranged in an upper surface of said positioning device, which is in communication with said at least one second cavity, that directly communicates with the headspace) (Fig. 2, 30) and a compartment (i.e. wherein said at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with the gas-pressurized liquid) (Fig. 1, 16).

It is the Examiner's position that given that the first and second compartments are adjacent to each other, the second compartment (positioning device) (Fig. 1, 16) is arranged outside the first compartment (body) (Fig. 1, 14).

Given that the shell of the capsule comprises the bottoms of both the first and second compartments, it is the Examiner's position that the bottom surface of the body and the lower surface of the positioning device form an integral unit.

Given that the first and second compartments are roughly shaped like half spheres or cylinders that are aligned to create a capsule (C5/L9-14), it is the Examiner's position that they are designed as symmetrical bodies in relation to an axis (x).

Nash further discloses a weight which may be affixed to the interior of the cylinder (i.e. further comprising a weight positioned within said at least one first cavity of

Art Unit: 1782

said body; wherein said weight is an integral part of the said body) (C6/L22-26; Fig. 2, 34).

Regarding claims 14 and 16, It is noted that the reference teaches a capsule having a bottom (i.e. bottom part) and having a top (i.e. cover part) and a weight (Fig. 1 and 2). Given that the shell of the capsule (Fig. 1 and 2, 10) comprises the walls of the first and second compartments, it is the Examiner's position that the bottom and top (i.e. two parts) are connected to one another via side walls thereof.

Regarding claims 19-21, Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen and the lid is affixed and sealed, the cans have been previously filled with beverage (C6/L39-45; C7/L23-26), the capsule is used to create a head on a beverage such as beer (C1/L4-7), the interior of the capsule will be pressurized by gas in the headspace above the liquid and the trapped gas is able to exit the capsule when the container is opened and the pressure in the container drops (C2/L26-33) (i.e. use of an insert to improve the formation of gas bubbles in a gas-pressurized liquid, during the opening of the container, characterized in that the insert is introduced into the container after the open container is filled with the gas-pressurized liquid and the gas-pressurized liquid container is sealed, such that an overpressure develops compared to the ambient pressure within the gas-pressurized liquid container after sealing; wherein pressure which causes the overpressure to develop within the gas-pressurized liquid contain container sealing, is admitted to the headspace above the liquid in the liquid container; wherein the liquid is a foaming beverage).

7. Claims 1, 2, 5, 12-14, 16 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Houzego et al. (WO 95/04688).

Regarding claims 1, 2, 5, 12-14, 16 and 19-21, Houzego discloses a head generating device for use in a sealed and pressurized container which is partially filled with liquid (i.e. insert for being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace adjacent to the gas-pressurized liquid), comprising a hollow capsule having a ballast means such that the capsule will float of the liquid wherein liquid can enter the uppermost compartment (i.e. positioning device interconnected to said body, said positioning device having at least one second cavity) (Page 2, Para 6 – Page 3, Para 2), and having a lower compartment (i.e. body that is activated by pressure having at least one first cavity) (Page 11, Para 1, Fig. 1).

Given that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, it is the Examiner's position that the lower compartment can be activated by pressure (Page 1, Para 2). Houzego further discloses that a small opening (bottom of tube 22, Fig. 1) connects the lower compartment (i.e. body; first cavity) with the headspace (i.e. having an opening allows said at least one first cavity to communicate with the headspace) (Fig. 1).

Houzego further discloses wherein the upper compartment (i.e. positioning device comprising a floating body) has a small opening 16 that is submerged in the liquid when the capsule is placed on a liquid (an opening arranged in the lower surface of said positioning device, which is in communication with said at least one second

Art Unit: 1782

cavity, said opening being submerged in the gas-pressurized liquid when the insert is floating on the gas-pressurized liquid) and an opening 23 (i.e. ventilation opening arranged in an upper surface of said positioning device, which is in communication with said at least one second cavity that directly communicates with the headspace) (Fig.1), wherein the upper compartment fills with liquid, when the upper compartment is half full, the buoyancy of the capsule is reduced such that it will no longer float (i.e. wherein said at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with gas-pressurized liquid) (Page 11, Para 2).

It is the Examiner's position that given that the upper and lower compartments are adjacent to each other, the upper compartment (positioning device) is arranged outside the lower compartment (body).

Given that the lower compartment (body) is attached to the bottom of the upper compartment (positioning device), it is the Examiner's position that the bottom of the lower compartment (body) and the bottom of the upper compartment (positioning device) form an integral unit (i.e. wherein a bottom surface of said body and said lower surface of said positioning device form an integral unit).

Given that the upper and lower compartments are roughly shaped like equal halves of the capsule, it is the Examiner's position that they are designed as symmetrical bodies in relation to an axis (x).

Houzege discloses that the capsule comprises a weight whose mass is selected appropriately so that when the upper compartment is half full, the buoyancy of the



capsule is reduced such that it will no longer float (i.e. further comprising a weight positioned within said first cavity of said body) (Page 11, Para 2, Fig. 1, 17).

Given that the weight is attached to the structure of the capsule, it is the Examiner's position that the weight is an integral part of the body.

Regarding claims 14 and 16, it is noted that the reference teaches a lower compartment having a bottom (i.e. bottom part) and an upper compartment having a top (i.e. cover part) and a weight (Fig. 1). Given that the shell of the capsule (Fig. 1, 14) comprises the walls of the upper and lower compartments, it is the Examiner's position that the bottom and top are connected to one another via the side walls thereof.

Regarding claims 19-21, Houzego discloses that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, creating a head on the beverage (i.e. use of an insert to improve the formation of gas bubbles in a gas-pressurized liquid during the opening of the container wherein the insert is introduced into the container before or after the open container is filled with the gas-pressurized liquid, and the gas-pressurized liquid container is sealed, such that an overpressure develops compared to the ambient pressure within the gas-pressurized liquid container after the sealing) (Page 1, Para 2). Houzego discloses that the headspace contains pressurized nitrogen gas (i.e. wherein said overpressure pressure which is admitted into said headspace of the liquid container) (Page 10, Para 1). Houzego discloses that the capsule can be used in the production of head on a beer (i.e. wherein the liquid is a foaming beverage) (Page 1, Para 1).

8. Claims 1, 2, 5, 12-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Nash et al. (US 5,714,186).

Regarding claims 1, 2, 5 and 12-13, Nash discloses a head generating device comprising a capsule with two compartments that may be cylindrical in shape (i.e. insert for being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace) (Fig. 1, 14 and 16, abstract), wherein the first compartment (Fig. 1, 14) will pressurize (i.e. a body having at least one first cavity) (C5/L59-67) and beer will enter the second compartment (i.e. a positioning device interconnected to said body having at least one second cavity) (C6/L1-6; Fig. 1, 16), wherein the first compartment has a small opening which is above the level of the liquid (i.e. said body having an opening) (Fig. 2, top of tube 20), wherein the second compartment has a small opening (i.e. an opening arranged in a lower surface of said positioning device, which is in communication with said at least one second cavity) (Fig 1 and 2, 28) and an additional opening (i.e. ventilation opening arranged in an upper surface of said positioning device, which is in communication with said at least one second cavity) (Fig. 2, 30) and a compartment (Fig. 1, 16).

It is the Examiner's position that given that the first and second compartments are adjacent to each other, the second compartment (positioning device) (Fig. 1, 16) is arranged outside the first compartment (body) (Fig. 1, 14).

Given that the shell of the capsule comprises the bottoms of both the first and second compartments, it is the Examiner's position that the bottom surface of the body and the lower surface of the positioning device form an integral unit.

Given that the first and second compartments are roughly shaped like half spheres or cylinders that are aligned to create a capsule (C5/L9-14), it is the Examiner's position that they are designed as symmetrical bodies in relation to an axis (x).

Nash further discloses a weight which may be affixed to the interior of the cylinder (i.e. further comprising a weight positioned within said at least one first cavity of said body; wherein said weight is an integral part of the said body) (C6/L22-26; Fig. 2, 34).

Regarding claims 14 and 16, it is noted that the reference teaches a capsule having a bottom (i.e. bottom part) and having a top (i.e. cover part) and a weight (Fig. 1 and 2). Given that the shell of the capsule (Fig. 1 and 2, 10) comprises the walls of the first and second compartments, it is the Examiner's position that the bottom and top (i.e. two parts) are connected to one another via side walls thereof.

The recitation in the claims that the insert is "for being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace adjacent to the gas-pressurized liquid, the opening allows said at least one cavity to communicate with said headspace, an opening being submerged in the gas-pressurized liquid when said insert is floating on the gas-pressurized liquid, that the ventilation opening directly communicates with the headspace, that at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with the gas-pressurized liquid" are merely intended uses. Applicants attention is drawn to MPEP 2106(II)(C) which states that intended use statements must be evaluated to determine whether the intended use results in a

Art Unit: 1782

structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Nash discloses an insert as presently claimed, it is clear that the insert of Nash would be capable of performing the intended use, i.e. being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace adjacent to the gas-pressurized liquid, the opening allows said at least one cavity to communicate with said headspace, an opening being submerged in the gas-pressurized liquid when said insert is floating on the gas-pressurized liquid, that the ventilation opening directly communicates with the headspace, that at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with the gas-pressurized liquid, presently claimed as required in the above cited portion of the MPEP, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

9. Claims 1, 2, 5, 12-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Houzego et al. (WO 95/04688).

Regarding claims 1, 2, 5, 12-14 and 16, Houzego discloses a head generating device for use in a sealed and pressurized container which is partially filled with liquid (i.e. insert), comprising a hollow capsule having a ballast means such that the capsule

will float of the liquid wherein liquid can enter the uppermost compartment (i.e. positioning device interconnected to said body, said positioning device having at least one second cavity) (Page 2, Para 6 – Page 3, Para 2), and having a lower compartment (i.e. body) (Page 11, Para 1, Fig. 1).

Houzego further discloses that a small opening (bottom of tube 22, Fig. 1) connects the lower compartment (i.e. body; first cavity) with the headspace (i.e. having an opening) (Fig. 1).

Houzego further discloses wherein the upper compartment (i.e. positioning device comprising a floating body) has a small opening 16 that is submerged in the liquid when the capsule is placed on a liquid (an opening arranged in the lower surface of said positioning device, which is in communication with said at least one second cavity,) and an opening 23 (i.e. ventilation opening arranged in an upper surface of said positioning device, which is in communication with said at least one second cavity) (Fig.1).

It is the Examiner's position that given that the upper and lower compartments are adjacent to each other, the upper compartment (positioning device) is arranged outside the lower compartment (body).

Given that the lower compartment (body) is attached to the bottom of the upper compartment (positioning device), it is the Examiner's position that the bottom of the lower compartment (body) and the bottom of the upper compartment (positioning device) form an integral unit (i.e. wherein a bottom surface of said body and said lower surface of said positioning device form an integral unit).

Given that the upper and lower compartments are roughly shaped like equal halves of the capsule, it is the Examiner's position that they are designed as symmetrical bodies in relation to an axis (x).

Houzege discloses that the capsule comprises a weight whose mass is selected appropriately so that when the upper compartment is half full, the buoyancy of the capsule is reduced such that it will no longer float (i.e. further comprising a weight positioned within said first cavity of said body) (Page 11, Para 2, Fig. 1, 17).

Given that the weight is attached to the structure of the capsule, it is the Examiner's position that the weight is an integral part of the body.

Regarding claims 14 and 16, it is noted that the reference teaches a lower compartment having a bottom (i.e. bottom part) and an upper compartment having a top (i.e. cover part) and a weight (Fig. 1). Given that the shell of the capsule (Fig. 1, 14) comprises the walls of the upper and lower compartments, it is the Examiner's position that the bottom and top are connected to one another via the side walls thereof.

The recitation in the claims that the insert is "for being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace adjacent to the gas-pressurized liquid, the opening allows said at least one cavity to communicate with said headspace, an opening being submerged in the gas-pressurized liquid when said insert is floating on the gas-pressurized liquid, that the ventilation opening directly communicates with the headspace, that at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with the gas-pressurized liquid" are merely intended uses.

Art Unit: 1782

Applicants attention is drawn to MPEP 2106(II)(C) which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Houzego discloses an insert as presently claimed, it is clear that the insert of Houzego would be capable of performing the intended use, i.e. being added to a gas-pressurized liquid in a liquid container, the liquid container also having a headspace adjacent to the gas-pressurized liquid, the opening allows said at least one cavity to communicate with said headspace, an opening being submerged in the gas-pressurized liquid when said insert is floating on the gas-pressurized liquid, that the ventilation opening directly communicates with the headspace, that at least one second cavity ensures that said insert will sink into the gas-pressurized liquid when said at least one second cavity is filled with the gas-pressurized liquid, presently claimed as required in the above cited portion of the MPEP, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186) as applied to claim 1 above.

Regarding claim 10 and 11, it is the Examiner's position that given that the first and second compartments comprise half spheres or half cylinders adjacent to each other forming the shape of a sphere or a cylinder, that the first compartment (body) is arranged centrically to the floating body.

Nash does not disclose that the body is arranged in the positioning device.

However, since it has been held that rearranging parts of an invention involves only routine skill in the art while the device having the claimed dimensions would not perform differently than the prior art device, In re Japikse, 86 USPQ 70, it is the



Art Unit: 1782

Examiner's position that it would have been obvious to arrange the body that can be activated by pressure in the positioning device and the capsule would not perform differently.

13. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186) as applied to claim 1 above, in further view of Grieshaber et al. (US 1,567,050).

Regarding claims 10 and 11, it is the Examiner's position that given that the first and second compartments comprise half spheres or half cylinders adjacent to each other forming the shape of a sphere or a cylinder, that the first compartment (body) is arranged centrically to the floating body.

Nash does not disclose that the body is arranged in the positioning device.

Grieshaber discloses that conventionally submarines have ballast tanks along the hull, and are positioned around the outside of the inner compartment as shown in figure 1 (P1/L18-29, Fig. 1).

Nash and Grieshaber are analogous art because they both teach about structures that float on and submerge in liquids. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the design of Grieshaber regarding the placement of the first compartment in or within the second compartment in the capsule of Nash because that is the conventional design used in submersible devices and to provide increased stability to the structure.

14. Claims 7-9 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186), in view of Reichinger (WO 99/54229).

Regarding claims 7-9 and 22-25, Nash discloses all of the claim limitations as set forth above. It is the Examiner's position that the cavity of the first compartment is the first cavity and primary cavity and the small opening (top of tube 20, Fig. 2) is the opening in an upper surface thereof.

Nash does not disclose an auxiliary cavity which is adapted to accommodate a solid or liquid substance and is separated from the primary cavity by a partition, or that the partition between the said primary cavity and said auxiliary cavity is a circumferential wall which completely surrounds the auxiliary cavity or that the auxiliary cavity has the shape of a cylinder or that is symmetrical in relation to an axis (x), and said primary cavity has the shape of a cylindrical sleeve.

Reichinger discloses a two compartment container for use in a beverage container wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh (Page 1, Para 1), comprising a compartment filled with flavor (i.e. an auxiliary cavity adapted to accommodate a liquid substance separated from the primary cavity), comprising an inner side wall separates that flavor containing compartment preventing gas or fluid from escaping, and a weak closure means between the inner sidewall and the opposite part of the two compartment container so that upon opening, the inner sidewall is released and the flavor can escape (the partition between the said primary cavity and said auxiliary cavity is a circumferential wall which completely surrounds the auxiliary cavity) (Page 4, Para 2, Fig, 1a and 1b). It is clear from figures 1a and 1b that the inner sidewall is in the shape of a cylinder and the outer sidewall is in the shape of a

Art Unit: 1782

cylindrical sleeve surrounding the inner sidewall (the second cavity has the shape of a cylinder or that is symmetrical in relation to an axis (x), and said first cavity has the shape of a cylindrical sleeve) (Fig. 1a, 1b).

Nash and Reichinger are analogous art because they both teach about capsules which are activated by pressure located in beverage cans. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the compartment filled with flavor and the inner sidewall of Reichinger into the first compartment of the capsule of Nash to provide a capsule with the advantage of being able to provide a flavor to the beverage wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh.

It is the examiner's position that the primary cavity is the part of the first cavity outside of the auxiliary cavity.

Given that Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen and the lid is affixed and sealed, the cans have been previously filled with beverage (C6/L39-45; C7/L23-26), the capsule is used to create a head on a beverage such as beer (C1/L4-7), the interior of the capsule will be pressurized by gas in the headspace above the liquid and the trapped gas is able to exit the capsule when the container is opened and the pressure in the container drops (C2/L26-33) and given that Reichinger discloses that his capsule is precharged to a pressure above atmospheric and inserted into the container and the container is filled with a liquid (Page 2, Para3), it is the Examiner's position that modified Nash discloses

Art Unit: 1782

use of the capsule wherein the auxiliary cavity is filled with the liquid substance, the open container is filled with liquid, the capsule insert is introduced into the container after the liquid is filled into the container and the liquid container is sealed such that overpressure develops compared to the ambient pressure after the liquid container is sealed.

Given that Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen which pressurizes the can after it is sealed (i.e. wherein said overpressure is admitted into the headspace) (C3/L64-67), it is the Examiner's position that the overpressure is admitted into the headspace.

Given that the liquid in modified Nash is beer (carbonated beverage) (C1/L4-7) and the substance stored in modified Nash is a flavor compound, it is the Examiner's position that the liquid is beer and the solid or liquid is an aroma compound. Nash further discloses that the can is dosed with liquid nitrogen (i.e. filled with the addition of liquid nitrogen) (C3/L64-67).

Additionally, given that the beer is pressurized with nitrogen, not carbon dioxide, it could be considered "non-carbonated".

15. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186), in view of Wright et al. (US 5,705,209).

Regarding claims 15 and 17, Nash discloses all of the claim limitations as set forth above. It is noted that the reference teaches a capsule with a bottom (i.e. bottom part) and a top (i.e. cover part) and a weight (Fig. 1 and 2). Given that the top and bottom of the capsule of Nash are a cover part and a bottom part, it is the Examiner's

position that the cover part and bottom part comprise all said sidewalls (i.e. at least one of said cover part and said bottom part has all the said sidewalls of the insert).

Nash does not disclose that the bottom part and the top part are connected to one another via snap connections or a frictionally engaged connection or that the top and bottom of the capsule snappingly engage each other or extend around structures arranged there during connection.

Wright discloses an insert for a beverage container (C3/L5-10) having a top part and a bottom part which snappingly engage each other (Fig. 4).

Nash and Wright are analogous art because they both teach about inserts for a beverage container. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the snapping engagement design to connect the top and bottom portion of the capsule of Nash to provide a capsule that can be opened and closed easily so that components (such as the weight) can be easily placed inside the capsule.

16. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688).

Regarding claims 10 and 11, Houzego discloses all of the claim limitations as set forth above. It is the Examiner's position that given that the upper and lower compartments comprise equal halves adjacent to each other, that the lower compartment (body) is arranged centrally to the floating body.

Houzego does not disclose that the body is arranged in the positioning device.

However, since it has been held that rearranging parts of an invention involves only routine skill in the art while the device having the claimed dimensions would not

Art Unit: 1782

perform differently than the prior art device, In re Japikse, 86 USPQ 70, it is the Examiner's position that it would have been obvious to arrange the body that can be activated by pressure in or within the floating body and on the bottom of the floating body and the capsule would not perform differently.

17. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688) as applied to claim 1 above, in further view of Grieshaber et al. (US 1,567,050).

Regarding claim 10, it is the Examiner's position that given that the upper and lower compartments comprise equal halves adjacent to each other, that the lower compartment (body) is arranged centrically to the positioning device.

Houzego does not disclose that the body is arranged in the floating body.

Grieshaber discloses that conventionally submarines have ballast tanks along the hull, and are positioned around the outside of the inner compartment as shown in figure 1 (P1/L18-29, Fig. 1).

Houzego and Grieshaber are analogous art because they both teach about structures that float on and submerge in liquids. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the design of Grieshaber regarding the placement of the lower compartment in or within the upper compartment in the capsule of Houzego because that is the conventional design used in submersible devices and to provide increased stability to the structure.

18. Claims 7-9 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688), in view of Reichinger (WO 99/54229).

Regarding claims 7-9 and 22-25, Houzego discloses all of the claim limitations as set forth above. It is the Examiner's position that the cavity of the lower compartment (body) is the first cavity and primary cavity and the small opening (bottom of tube 22, Fig. 1) is the said at least one opening in an upper surface thereof.

Houzego does not disclose an auxiliary cavity which is intended to accommodate a solid or liquid substance and is separated from the primary cavity by a partition, or that the partition between the said primary cavity and said auxiliary cavity is a circumferential wall which completely surrounds the said auxiliary cavity or that the auxiliary cavity has the shape of a cylinder or that is symmetrical in relation to an axis (x), and the said primary cavity has the shape of a cylindrical sleeve.

Reichinger discloses a two compartment container for use in a beverage container wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh (Page 1, Para 1), comprising a compartment filled with flavor (i.e. an auxiliary cavity intended to accommodate a liquid substance separated from the primary cavity), comprising an inner side wall separates that flavor containing compartment preventing gas or fluid from escaping, and a weak closure means between the inner sidewall and the opposite part of the two compartment container so that upon opening, the inner sidewall is released and the flavor can escape (separated from the primary cavity by a wall that can be opened by relatively weak forces; the partition between the primary and auxiliary cavities is a circumferential wall which completely surrounds the said auxiliary cavity) (Page 4, Para 2, Fig, 1a and 1b). It is clear from figures 1a and 1b that the inner

Art Unit: 1782

sidewall is in the shape of a cylinder and the outer sidewall is in the shape of a cylindrical sleeve surrounding the inner sidewall (the auxiliary cavity has the shape of a cylinder that is symmetrical in relation to an axis (x), and the said primary cavity has the shape of a cylindrical sleeve) (Fig. 1a, 1b).

Houzego and Reichinger are analogous art because they both teach about capsules which are activated by pressure located in beverage cans. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the compartment filled with flavor and the inner sidewall of Reichinger into the lower compartment of the capsule of Houzego to provide a capsule with the advantage of being able to provide a flavor to the beverage wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh.

It is the examiner's position that the primary cavity is the part of the first cavity outside of the auxiliary cavity.

Given that Houzego discloses that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, creating a head on the beverage (Page 1, Para 2) and given that Reichinger discloses that his capsule is precharged to a pressure above atmospheric and inserted into the container and the container is filled with a liquid (Page 2, Para3), it is the Examiner's position that modified Houzego discloses use of the capsule wherein the auxiliary cavity is filled with the liquid substance, the open container is filled with liquid, the capsule insert is introduced into the container before



the liquid is filled into the container and the liquid container is sealed such that overpressure develops compared to the ambient pressure after the liquid container is sealed.

Given that Houzego discloses that the headspace contains pressurized nitrogen gas (i.e. wherein said overpressure is admitted into the headspace) (Page 10, Para 1), it is the Examiner's position that the overpressure is admitted into the headspace.

Given that the liquid in modified Houzego is beer (carbonated beverage) (Page 1, Para 1) and the substance stored in modified Houzego is a flavor compound, it is the Examiner's position that the liquid is beer and the solid or liquid substance is an aroma compound. Houzego further discloses that the headspace can be dosed with liquid nitrogen (i.e. filled with the addition of liquid nitrogen) (Page 15, Para 6).

Additionally, given that the beer is pressurized with nitrogen, not carbon dioxide, it could be considered "non-carbonated".

19. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688), in view of Wright et al. (US 5,705,209).

Regarding claims 15 and 17, Houzego discloses all of the claim limitations as set forth above. It is noted that the reference teaches a lower compartment having a bottom (i.e. bottom part) and an upper compartment having a top (i.e. cover part) and a weight (Fig. 1). Given that the top and bottom of the capsule of Houzego are a cover part and a bottom part, it is the Examiner's position that the cover part and bottom part comprise all said sidewalls (i.e. at least one of said cover part and said bottom part has all the said sidewalls of the insert).

Houzego does not disclose that the bottom part and the top part are connected to one another via snap connections or a frictionally engaged connection or that the top and bottom of the capsule snappingly engage each other.

Wright discloses an insert for a beverage container (C3/L5-10) having a top part and a bottom part which snappingly engage each other (Fig. 4).

Houzego and Wright are analogous art because they both teach about inserts for a beverage container. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the snapping engagement design to connect the top and bottom portion of the capsule of Houzego to provide a capsule that can be opened and closed easily so that components (such as the weight) can be easily placed inside the capsule.

### ***Response to Arguments***

20. Applicant's arguments filed 30 August 2010 have been fully considered but they are not persuasive.

Applicant argues that Nash does not teach the insert of claim 1.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant argues that Nash does not disclose locating the positioning device outside the body as claimed.

As set forth above, it is the Examiner's position that given that the first and second compartments are adjacent to each other, the second compartment (positioning device) (Fig. 1, 16) is arranged outside the first compartment (body) (Fig. 1, 14).

### ***Conclusion***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Fri, 7:30am-5pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/538,261  
Art Unit: 1782

Page 27

JY 12/10/10

/Rena L. Dye/  
Supervisory Patent Examiner, Art Unit 1782